

Serial No. 10/780,113
Atty. Docket No. RANPP0352USA

Amendments to the Claims

1. (original) A dunnage conversion system for converting multiple plies of sheet material into a relatively less dense, three-dimensional dunnage product, the system comprising: a converter including a conversion assembly that is driven by a motor to advance multiple plies of sheet material through the converter for conversion of the multiple plies of sheet material into a relatively less dense, three-dimensional dunnage product, where the multiple plies of sheet stock material are fed to the conversion assembly along respective infeed paths; a controller that controls operation of the motor; and an end-of-web detector located upstream of the conversion assembly, the end-of-web detector including plural sensors respectively associated with the separate infeed paths for detecting the presence or absence of the respective ply and providing an output to the controller indicative thereof.

2. (original) A conversion system as set forth in claim 1, wherein the plural sensors each include a transmitter for transmitting an electromagnetic beam and a receiver for receiving the electromagnetic beam.

3. (original) A conversion system as set forth in claim 2, wherein the transmitter and receiver of each sensor are located on the same side of the infeed path for the respective ply of sheet stock material, and the end-of-web detector further includes a reflective surface for each sensor disposed on an opposite side of the infeed path and positioned to reflect the electromagnetic beam transmitted by the transmitter to the receiver of the respective sensor.

4. (original) A conversion system as set forth in claim 3, wherein the reflective surfaces for a pair of the sensors are located on opposite sides of a reflector body located between the infeed paths of respective plies of the sheet stock material.

Serial No. 10/780,113
Atty. Docket No. RANPP0352USA

5. (original) A conversion system as set forth in claim 4, comprising a splicing surface against which the trailing ends of the plies of a spent supply of stock material can be joined to the leading ends of the plies of a new supply of stock material, and the sensors are located at an upstream end of the splicing surface.

6. (currently amended) A conversion system as set forth in claim 5, further comprising at least one spacer separator member interposed between the infeed paths of the sheet stock material plies for separating the plies, and wherein the reflector body is located between the splicing surface and the spacer member.

7. (currently amended) A conversion system as set forth in claim 1, further comprising at least one spacer separator member interposed between the infeed paths of the sheet stock material plies for separating the plies.

8. (original) A method of converting multiple plies of sheet material into a relatively less dense, three-dimensional dunnage product, comprising the steps of:

operating a motor of a converter to drive a conversion assembly that advances multiple plies of sheet material through the converter for conversion of the multiple plies of sheet material into a relatively less dense dunnage product;

feeding multiple plies of sheet stock material to the conversion assembly along respective infeed paths;

using plural sensors respectively associated with the separate infeed paths to detect the presence or absence of the respective ply; and

ceasing operation of the motor in response to a signal from any one of the plural sensors.

9. (new) A method as set forth in claim 8, further comprising the step of splicing a leading end of a new ply of sheet stock material to a trailing end of an old ply of sheet stock material after the motor has ceased operation.

Serial No. 10/780,113
Atty. Docket No. RANPP0352USA

10. (new) A conversion system as set forth in claim 6, wherein the at least one separator member includes a roller.

11. (new) A conversion system as set forth in claim 6, wherein the at least one separator member extends across the infeed path of the sheet stock material.

12. (new) A conversion system as set forth in claim 7, wherein the at least one separator member includes a roller.

13. (new) A conversion system as set forth in claim 7, wherein the at least one separator member extends across the infeed path of the sheet stock material.